PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2704984

SUBMISSION TYPE:		CORRECTIVE ASSIGNMENT	CORRECTIVE ASSIGNMENT			
NATURE OF CONVE	YANCE:	previously recorded on Reel 03	Corrective Assignment to correct the ASSIGNOR: ECOMOMIDES, ARIS N. previously recorded on Reel 032020 Frame 0441. Assignor(s) hereby confirms the ASSIGNOR: ECONOMIDES, ARIS N			
CONVEYING PARTY	DATA					
		Name	Execution Date			
ARIS N. ECONOMID	ES		01/16/2014			
DAVID M. VALENZUI	ELA		01/14/2014			
RECEIVING PARTY D	ΑΤΑ					
Name:	REGENERON PHARMACEUTICALS, INC.					
Street Address:	777 OLD SAW MILL RIVER ROAD					
City:		N				
State/Country:	NEW JERSEY					
Postal Code:	10591-6707					
Property Type		Number				
Application Number: 13		13164176	64176			
CORRESPONDENCE						
Fax Number: (617)832-7000 Phanes: 617.832-4000						
Phone: 617 832 1000 Email: wherron@foleyhoag.com						
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Correspondent Name	: FOL	EY HOAG LLP				
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Addition 1 to a A	BOS	TON, MASSACHUSETTS 02210-2600	1			
Address Line 4:						
Address Line 4:	NUMBER:	RPB-001.03				
		RPB-001.03				

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Total Attachments: 6

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502645965 01/22/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2692573

SUBMISSION TYPE:		NEW ASSIGNMENT						
NATURE OF CONVEYANCE:		ASSIGNMENT						
CONVEYING PARTY DATA								
		Na	ame	Execution Date				
ARIS N. ECOMOMIDE	S			01/16/2014				
DAVID M. VALENZUEI	LA			01/14/2014				
RECEIVING PARTY DATA								
Name:	REGENERON PHARMACEUTICALS, INC.							
Street Address:	777 OLD SAW MILL RIVER ROAD							
City:	TARRYTOWN							
State/Country:	NEW YORK							
Postal Code:	10591-6707							
PROPERTY NUMBERS Total: 1 Property Type Number								
Property Type Patent Number:		8502018						
CORRESPONDENCE DATA								
Fax Number: (617)832-7000								
Phone: 617 832 1000								
Email:		-	oleyhoag.com					
Correspondence will be sent via US Mail when the email attempt is unsuccessful.								
Correspondent Name: FOLEY HOAG LLP Address Line 1: 155 SEAPORT BLVD								
Address Line 1: SEAPORT BLVD Address Line 2: SEAPORT WORLDTRADE CENTER WEST								
Address Line 4: BOSTON, MASSACHUSETTS 02210-2600								
ATTORNEY DOCKET NUMBER:		RPB-001.03						
NAME OF SUBMITTER:		WENDY HERRON						
Signature:		/Wendy Herron/						
Date:			01/22/2014					

ASSIGNMENT

I, David M. Valenzuela, for valuable consideration received from **REGENERON PHARMACEUTICALS, INC.**, a corporation organized and existing under the laws of the State of New York, with offices at 777 Old Saw Mill River Road, Tarrytown, New York 10591-6707, U.S.A., the receipt of which is hereby acknowledged, have sold, assigned, transferred, and do hereby sell, assign and transfer unto said

REGENERON PHARMACEUTICALS, INC.

its successors and assigns, my entire right, title and interest for all countries in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the following patents and patent applications:

- U.S. Patent Application Number 09/784,859, filed on February 16, 2001 and issued as U.S. Patent Number 6,596,541 on July 22, 2003;
- U.S. Patent Application Number 10/076,840, filed on February 15, 2002 and issued as U.S. Patent Number 7,105,348 on September 12, 2006;
- U.S. Patent Application Number 11/595,427, filed on November 9, 2006;
- U.S. Patent Application Number 13/154,976, filed on June 7, 2011;
- U.S. Patent Application Number 13/164,176, filed on June 20, 2011 and issued as U.S. Patent Number 8,502,018;
- U.S. Patent Application Number 13/719,819, filed on December 19, 2012;
- U.S. Patent Application Number 13/719,842 filed on December 19, 2012;
- U.S. Patent Application Number 14/035,432 filed on September 24, 2013;
- U.S. Patent Application Number 14/036,514 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,518 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,530 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,774 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,778 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,784 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,865 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,892 filed on September 25, 2013;
- U.S. Patent Application Number 14/046,279 filed on October 4, 2013;
- U.S. Patent Application Number 14/046,285 filed on October 4, 2013;
- U.S. Patent Application Number 14/046,291 filed on October 4, 2013;
- U.S. Patent Application Number 14/080,114 filed on October 14, 2013;

as well as all divisions, renewals, continuations, and continuations-in-part thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents utility models, and designs which may hereafter be filed for said inventions in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application(s) under the Patent Laws of the United States, the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention, or under any other available international agreement or under the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of

Page 1 of 2

industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said inventions in any country or countries foreign to the United States and all extensions, renewals and reissues thereof.

And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any Official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said corporation, its successors and assigns.

JANUAN 14 2014 Date

David M. Valenzuela

Page 2 of 2

ASSIGNMENT

I, Aris N. Economides, for valuable consideration received from **REGENERON PHARMACEUTICALS, INC.**, a corporation organized and existing under the laws of the State of New York, with offices at 777 Old Saw Mill River Road, Tarrytown, New York 10591-6707, U.S.A., the receipt of which is hereby acknowledged, have sold, assigned, transferred, and do hereby sell, assign and transfer unto said

REGENERON PHARMACEUTICALS, INC.

its successors and assigns, my entire right, title and interest for all countries in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the following patents and patent applications:

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- U.S. Patent Application Number 13/164,176, filed on June 20, 2011 and issued as U.S. Patent Number 8,502,018;
- U.S. Patent Application Number 13/719,819, filed on December 19, 2012;
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- U.S. Patent Application Number 14/035,432 filed on September 24, 2013;
- U.S. Patent Application Number 14/036,514 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,518 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,530 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,774 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,778 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,784 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,865 filed on September 25, 2013;
- U.S. Patent Application Number 14/036,892 filed on September 25, 2013;
- U.S. Patent Application Number 14/046,279 filed on October 4, 2013;
- U.S. Patent Application Number 14/046,285 filed on October 4, 2013;
- U.S. Patent Application Number 14/046,291 filed on October 4, 2013;
- U.S. Patent Application Number 14/080,114 filed on October 14, 2013;

as well as all divisions, renewals, continuations, and continuations-in-part thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents utility models, and designs which may hereafter be filed for said inventions in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application(s) under the Patent Laws of the United States, the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention, or under any other available international agreement or under the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of

Page 1 of 2

industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said inventions in any country or countries foreign to the United States and all extensions, renewals and reissues thereof.

And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any Official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said corporation, its successors and assigns.

01/16/2014 Date

Aris N. Economides



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

JANUARY 24, 2014

PTAS

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FOLEY HOAG LLP 155 SEAPORT BLVD SEAPORT WORLDTRADE CENTER WEST BOSTON, MA 02210-2600

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ASSIGNOR: ECOMOMIDES, ARIS N.

ASSIGNOR: VALENZUELA, DAVID M. DOC DATE: 01/16/2014

DOC DATE: 01/14/2014

ASSIGNEE:

REGENERON PHARMACEUTICALS, INC. 777 OLD SAW MILL RIVER ROAD TARRYTOWN, NEW YORK 10591-6707

APPLICATION NUMBER: 13164176FILING DATE: 06/20/2011PATENT NUMBER: 8502018ISSUE DATE: 08/06/2013TITLE: METHODS OF MODIFYING EUKARYOTIC CELLS

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PATENT DEPT. DOCKETING

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